

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/573,500  
Source: IFWP  
Date Processed by STIC: 4/9/06

***ENTERED***

## CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/573,500

CRF Edit Date: 4/7/06  
Edited by: mw

\_\_\_ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

\_\_\_ Corrected the SEQ ID NO. Sequence numbers edited were:

\_\_\_\_\_

\_\_\_ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

\_\_\_\_\_

\_\_\_ Deleted: \_\_\_ invalid beginning/end-of-file text ; \_\_\_ page numbers

\_\_\_ Inserted mandatory headings/numeric identifiers, specifically:

\_\_\_\_\_

\_\_\_ Moved responses to same line as heading/numeric identifier, specifically:

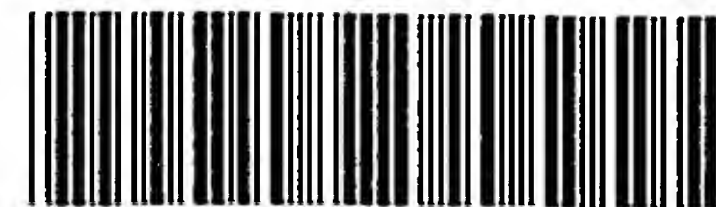
\_\_\_\_\_

\_\_\_ Other:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



IFWP

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/573,500

DATE: 04/07/2006

TIME: 12:43:06

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04072006\J573500.raw

3 <110> APPLICANT: Bayer AG, BHC  
 5 <120> TITLE OF INVENTION: New acylglycerol acyltransferase-like protein MGAT-X1 and  
 uses thereof

7 <130> FILE REFERENCE: Le A 36 894  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/573,500

C--> 9 <141> CURRENT FILING DATE: 2006-03-27

9 <160> NUMBER OF SEQ ID NOS: 5

11 <170> SOFTWARE: PatentIn version 3.1

13 <210> SEQ ID NO: 1

14 <211> LENGTH: 1131

15 <212> TYPE: DNA

16 <213> ORGANISM: Homo sapiens

18 <400> SEQUENCE: 1

19	actgttctga	gatctttgcc	tccctcaggc	tcccgagaat	catggctcat	tccaagcagc	60
20	ctagtcactt	ccagagtctg	atgcttctgc	agtggccttt	gagctacctt	gccatctttt	120
21	ggatcttgca	gccattgttc	gtctacctgc	tgtttacatc	cttggtggccg	ctaccagtgc	180
22	tttactttgc	ctggttgttc	ctggactgga	agaccccaga	gcgagggtggc	aggcgttcgg	240
23	cctgggtaag	gaactgggtg	gtctggaccc	acatcaggga	ctatttcccc	attacgatcc	300
24	tgaagacaaa	ggacctatca	cctgagcaca	actacctcat	gggggttcac	ccccatggcc	360
25	tcctgacctt	tggcgccttc	tgcaacttct	gcactgaggc	cacaggcttc	tcgaagacct	420
26	tcccaggcat	cactcctcac	ttggccacgc	tgtcctgggt	cttcaagatc	ccctttgtta	480
27	gggagtacct	catggccaaa	ggtgtgtgct	ctgtgagcca	gccagccatc	aactatctgc	540
28	tgagccatgg	cactggcaac	ctcgtgggca	ttgtagtggg	aggtgtgggt	gaggccctgc	600
29	aaagtgtgcc	caacaccacc	accctcatcc	tccagaagcg	caaggggttc	gtgcgcacag	660
30	ccctccagca	tggggctcat	ctgggtccca	ccttcacttt	tggggaaact	gaggtgtatg	720
31	atcaggtgct	gttccataag	gatagcagga	tgtacaagtt	ccagagctgc	ttccgccgta	780
32	tcttttggtt	ctactgttgt	gtcttctatg	gacaaagctt	ctgtcaaggc	tccactgggc	840
33	tcctgccata	ctccaggcct	attgtcactg	tgggttgagg	gcctctgcca	ctgccccaaa	900
34	ttgaaaagcc	aagccaggag	atggtggaca	aataccatgc	actttatatg	gatgctctgc	960
35	acaaactggt	cgaccagcat	aagaccact	atggctgctc	agagacccaa	aagctgtttt	1020
36	tcctgtgaat	gaaggtactg	catgccagag	agcacaggag	tgctgcctt	gaagaagaga	1080
37	ctcatctgcc	actaaccaaa	gacaggcagg	agatgaggga	ggttatatgt	g	1131

40 <210> SEQ ID NO: 2

41 <211> LENGTH: 328

42 <212> TYPE: PRT

43 <213> ORGANISM: Homo sapiens

45 <400> SEQUENCE: 2

46	Met	Ala	His	Ser	Lys	Gln	Pro	Ser	His	Phe	Gln	Ser	Leu	Met	Leu	Leu
47	1				5					10				15		
48	Gln	Trp	Pro	Leu	Ser	Tyr	Leu	Ala	Ile	Phe	Trp	Ile	Leu	Gln	Pro	Leu
49			20						25					30		
50	Phe	Val	Tyr	Leu	Leu	Phe	Thr	Ser	Leu	Trp	Pro	Leu	Pro	Val	Leu	Tyr
51			35					40					45			
52	Phe	Ala	Trp	Leu	Phe	Leu	Asp	Trp	Lys	Thr	Pro	Glu	Arg	Gly	Gly	Arg

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53	50	55	60
54	Arg Ser Ala Trp Val	Arg Asn Trp Cys Val	Trp Thr His Ile Arg Asp
55	65	70	75
56	Tyr Phe Pro Ile Thr	Ile Leu Lys Thr	Lys Asp Leu Ser Pro Glu His
57	85	90	95
58	Asn Tyr Leu Met Gly	Val His Pro His	Gly Leu Leu Thr Phe Gly Ala
59	100	105	110
60	Phe Cys Asn Phe Cys	Thr Glu Ala Thr	Gly Phe Ser Lys Thr Phe Pro
61	115	120	125
62	Gly Ile Thr Pro His	Leu Ala Thr Leu	Ser Trp Phe Phe Lys Ile Pro
63	130	135	140
64	Phe Val Arg Glu Tyr	Leu Met Ala Lys	Gly Val Cys Ser Val Ser Gln
65	145	150	155
66	Pro Ala Ile Asn Tyr	Leu Leu Ser His	Gly Thr Gly Asn Leu Val Gly
67	165	170	175
68	Ile Val Val Gly Gly	Val Gly Glu Ala	Leu Gln Ser Val Pro Asn Thr
69	180	185	190
70	Thr Thr Leu Ile Leu	Gln Lys Arg Lys	Gly Phe Val Arg Thr Ala Leu
71	195	200	205
72	Gln His Gly Ala His	Leu Val Pro Thr	Phe Thr Phe Gly Glu Thr Glu
73	210	215	220
74	Val Tyr Asp Gln Val	Leu Phe His Lys	Asp Ser Arg Met Tyr Lys Phe
75	225	230	235
76	Gln Ser Cys Phe Arg	Arg Ile Phe Gly	Phe Tyr Cys Cys Val Phe Tyr
77	245	250	255
78	Gly Gln Ser Phe Cys	Gln Gly Ser Thr	Gly Leu Leu Pro Tyr Ser Arg
79	260	265	270
80	Pro Ile Val Thr Val	Val Gly Glu Pro	Leu Pro Leu Pro Gln Ile Glu
81	275	280	285
82	Lys Pro Ser Gln Glu	Met Val Asp Lys	Tyr His Ala Leu Tyr Met Asp
83	290	295	300
84	Ala Leu His Lys Leu	Phe Asp Gln His	Lys Thr His Tyr Gly Cys Ser
85	305	310	315
86	Glu Thr Gln Lys Leu	Phe Phe Leu	
87	325		

89 &lt;210&gt; SEQ ID NO: 3

90 &lt;211&gt; LENGTH: 20

91 &lt;212&gt; TYPE: DNA

92 &lt;213&gt; ORGANISM: artificial sequence

94 &lt;220&gt; FEATURE:

95 &lt;223&gt; OTHER INFORMATION: forward primer

97 &lt;400&gt; SEQUENCE: 3

98 ccaggcctat tgtcactgtg

20

100 &lt;210&gt; SEQ ID NO: 4

101 &lt;211&gt; LENGTH: 20

102 &lt;212&gt; TYPE: DNA

103 &lt;213&gt; ORGANISM: artificial sequence

105 &lt;220&gt; FEATURE:

106 &lt;223&gt; OTHER INFORMATION: reverse primer

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DATE: 04/07/2006

PATENT APPLICATION: US/10/573,500

TIME: 12:43:06

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04072006\J573500.raw

108 <400> SEQUENCE: 4	
109 ctggcttggc ttttcaattt	20
111 <210> SEQ ID NO: 5	
112 <211> LENGTH: 21	
113 <212> TYPE: DNA	
114 <213> ORGANISM: artificial sequence	
116 <220> FEATURE:	
117 <223> OTHER INFORMATION: probe	
119 <400> SEQUENCE: 5	
120 ttggggagcc tctgccactg c	21

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/573,500

DATE: 04/07/2006

TIME: 12:43:07

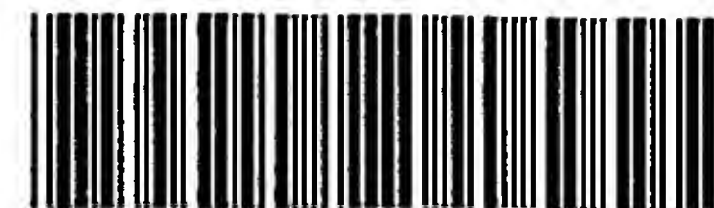
Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04072006\J573500.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

## **Raw Sequence Listing before editing (for reference only)**



IFWP

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/573,500

DATE: 04/06/2006

TIME: 10:43:41

Input Set : A:\SQL 36894.txt

Output Set: N:\CRF4\04062006\J573500.raw

3 <110> APPLICANT: Bayer AG, BHC  
 5 <120> TITLE OF INVENTION: New acylglycerol acyltransferase-like protein MGAT-X1 and  
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14 &lt;211&gt; LENGTH: 1131

15 &lt;212&gt; TYPE: DNA

16 &lt;213&gt; ORGANISM: Homo sapiens

18 &lt;400&gt; SEQUENCE: 1

19 actgttctga gatctttgcc tccctcaggc tcccgagaat catggctcat tccaagcagc 60  
 20 ctagtcaact ccagagtctg atgcttctgc agtggccttt gagctacctt gccatctttt 120  
 21 ggatcttgca gccattgttc gtctacctgc tgtttacatc cttgtggccg ctaccagtgc 180  
 22 ttacttttgc ctggttggtc ctggactgga agaccccaga gcgagggtgc aggcgttcgg 240  
 23 cctgggtaag gaactggtgt gtctggaccc acatcaggga ctatttcccc attacgatcc 300  
 24 tgaagacaaa ggacctatca cctgagcaca actacctcat gggggttcac ccccatggcc 360  
 25 tcctgacctt tggcgccttc tgcaacttct gcaactgaggc cacaggcttc tcgaagacct 420  
 26 tcccaggcat cactcctcac ttggccacgc tgtcctggtt cttcaagatc ccctttgtta 480  
 27 gggagtacct catggccaaa ggtgtgtgct ctgtgagcca gccagccatc aactatctgc 540  
 28 tgagccatgg cactggcaac ctgctgggca ttgtagtggg aggtgtgggt gaggccctgc 600  
 29 aaagtgtgcc caacaccacc accctcatcc tccagaagcg caaggggttc gtgcgcacag 660  
 30 ccctccagca tggggctcat ctggtcccca ccttactttt tggggaaact gaggtgtatg 720  
 31 atcagggtgct gttccataag gatagcagga tgtacaagtt ccagagctgc ttccgccgta 780  
 32 tcttttggtt ctactgttgt gtcttctatg gacaaagctt ctgtcaaggc tccactgggc 840  
 33 tcctgccata ctccaggcct attgtcactg tgggtgggga gcctctgcca ctgccccaaa 900  
 34 ttgaaaagcc aagccaggag atggtggaca aataccatgc actttatatg gatgctctgc 960  
 35 acaaactgtt cgaccagcat aagaccact atggctgctc agagacccaa aagctgtttt 1020  
 36 tcctgtgaat gaaggtagt catgcccagg agcacaggag tgcctgcctt gaagaagaga 1080  
 37 ctcatctgcc actaaccaaa gacaggcagg agatgaggga ggttatatgt g 1131

40 &lt;210&gt; SEQ ID NO: 2

41 &lt;211&gt; LENGTH: 328

42 &lt;212&gt; TYPE: PRT

43 &lt;213&gt; ORGANISM: Homo sapiens

45 &lt;400&gt; SEQUENCE: 2

46 Met Ala His Ser Lys Gln Pro Ser His Phe Gln Ser Leu Met Leu Leu  
 47 1 5 10 15  
 48 Gln Trp Pro Leu Ser Tyr Leu Ala Ile Phe Trp Ile Leu Gln Pro Leu  
 49 20 25 30  
 50 Phe Val Tyr Leu Leu Phe Thr Ser Leu Trp Pro Leu Pro Val Leu Tyr  
 51 35 40 45  
 52 Phe Ala Trp Leu Phe Leu Asp Trp Lys Thr Pro Glu Arg Gly Gly Arg

Does Not Comply  
 Corrected Diskette Needed



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PATENT APPLICATION: US/10/573,500

DATE: 04/06/2006

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57	85	90	95
58	Asn Tyr Leu Met Gly	Val His Pro His Gly	Leu Leu Thr Phe Gly Ala
59	100	105	110
60	Phe Cys Asn Phe Cys	Thr Glu Ala Thr Gly	Phe Ser Lys Thr Phe Pro
61	115	120	125
62	Gly Ile Thr Pro His	Leu Ala Thr Leu Ser	Trp Phe Phe Lys Ile Pro
63	130	135	140
64	Phe Val Arg Glu Tyr	Leu Met Ala Lys Gly	Val Cys Ser Val Ser Gln
65	145	150	155
66	Pro Ala Ile Asn Tyr	Leu Leu Ser His Gly	Thr Gly Asn Leu Val Gly
67	165	170	175
68	Ile Val Val Gly Gly	Val Gly Glu Ala Leu	Gln Ser Val Pro Asn Thr
69	180	185	190
70	Thr Thr Leu Ile Leu	Gln Lys Arg Lys Gly	Phe Val Arg Thr Ala Leu
71	195	200	205
72	Gln His Gly Ala His	Leu Val Pro Thr Phe	Thr Phe Gly Glu Thr Glu
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83	290	295	300
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85	305	310	315
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103 &lt;213&gt; ORGANISM: artificial sequence

105 &lt;220&gt; FEATURE:

106 &lt;223&gt; OTHER INFORMATION: reverse primer

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/573,500

DATE: 04/06/2006

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Input Set : A:\SQL 36894.txt

Output Set: N:\CRF4\04062006\J573500.raw

108 <400> SEQUENCE: 4  
109 ctggcttggc ttttcaattt 20  
111 <210> SEQ ID NO: 5  
112 <211> LENGTH: 21  
113 <212> TYPE: DNA  
114 <213> ORGANISM: artificial sequence  
116 <220> FEATURE:  
117 <223> OTHER INFORMATION: probe  
119 <400> SEQUENCE: 5  
120 ttggggagcc tctgccactg c 21  
W--> 122 Le A 36 894-Foreign Countries  
W--> 125 - 3 -  
W--> 129 Le A 36 894-Foreign Countries  
W--> 132 - 1 -

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/573,500

DATE: 04/06/2006

TIME: 10:43:42

Input Set : A:\SQL 36894.txt

Output Set: N:\CRF4\04062006\J573500.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No  
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:122 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5  
L:125 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:129 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5  
L:132 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5